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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,669	09/23/2003	Larry Runyon	BA4-198	5549
21567	7590	12/20/2005		EXAMINER
				NGUYEN, HUNG T
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/669,669	RUNYON ET AL.
	Examiner HUNG T. NGUYEN	Art Unit 2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 October 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 13-19,21-41 and 43-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 13-19,21,38-41 and 43 is/are allowed.
- 6) Claim(s) 22-27,29-32,35,37,44-46 and 48-53 is/are rejected.
- 7) Claim(s) 28,33,34,36,47 and 54 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 October 2005 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 50-53 are rejected under 35 U.S.C. 102(e) as being anticipated by McSheffrey et al. (U.S. 6,488,099).

Regarding claims 50-53, McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by **radio signal** [ figs. 1-3,11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20, col.12, line 60 to col.13, line 4 and abstract ] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [ col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 ];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 and col.12, line 60 to col.13, line 4 ];
- the detectors having electronic circuits contain radio frequency **identification** signals / **encoded identifications** / tags transponders are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken and so on [ **col.8, line 54 to col.9, line 20 and col.12, line 60 to col.13, line 4** ];
- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100, 102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tampering as tether (32), movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) by **radio signal** as desired [ figs. 1-3,11, col.8, line 54 to col.9, line 20, lines 57-62 and **col.12, line 60 to col.13, line 4** ].

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 22-27, 29-32, 35 & 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over McSheffrey et al. (U.S. 6,488,099).

Regarding claim 22-24, McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [ figs. 1-3,11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20, **col.12, line 60 to col.13, line 4 and abstract** ] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [ col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 ];
- the detectors coupled to transmitters for transmitting warning signals (100,102, 104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 and **col.12, line 60 to col.13, line 4** ];
- the detectors having electronic circuits contain radio frequency **identification** signals / encoded identifications / tags transponders are attached to each of the fire

extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken and so on [ col.12, line 60 to col.13, line 4 ];

- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100,102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tampering the tether (32), movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) [ figs. 1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62 ].

The reference of McSheffrey does not specifically mention tampering indicating device and the fire extinguisher trigger pin as claimed by the applicant

However, McSheffrey does disclose a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure in the tank (34) of the fire extinguisher and material in a volume of the tank, internal and external conditions which the fire extinguishers (12) are docked in a station (16) [ figs.4-7, col.4, lines 2-24, col.6, lines 45-58 and col.10, lines 24-62 ];

- the detectors having **electronic circuits** contain radio frequency identification signals / **encoded identifications / tags transponders** are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken / tampered or **we may call pin is broken** [ col.8, line 54 to col.9, line 20 col.12, line 60 to col.13, line 4 ];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 ].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the system of McSheffrey for monitoring the fire extinguisher is in good condition at all time.

Regarding claims 25-27, McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [ figs. 1-3,11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20, **col.12, line 60 to col.13, line 4 and abstract** ] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [ col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.10, lines 24-62 ];
- the detectors coupled to transmitters for transmitting warning signals (100,102, 104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 and col.12, line 60 to col.13, line 4 ];
- the detectors having electronic circuits contain radio frequency **identification** signals / **encoded identifications** / tags transponders are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as

tamper, removed, tether (32) is broken / tampered and so on [ col.12, line 60 to col.13, line 4 ];

- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100,102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tampering the tether (32), movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) by radio signal as desired [ figs. 1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62 ].

Regarding claims 29 & 37, The reference of McSheffrey does not specifically mention the tampering signal are defined by transceivers as claimed by the applicant.

However, McSheffrey does disclose the detectors coupled to transmitters for transmitting warning signals (100,102, 104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 and col.12, line 60 to col.13, line 4 ];

- the detectors having electronic circuits contain radio frequency **identification** signals / encoded identifications / tags transponders are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken or tether is tampered** [ col.8, line 54 to col.9, line 20 col.12, line 60 to col.13, line 4 ].

Therefore, it would have been obvious to one having ordinary skill in the art to have the method of McSheffrey for transmitting radio warning signal to the remote receiver if ANY tire extinguisher is not in the normal condition as the tether is tampered.

Regarding claim 30-32 & 35, McSheffrey discloses a system of monitoring a plurality of fire

extinguishers (12) from a remote location (26) by wireless signal [ figs. 1-3,11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20, **col.12, line 60 to col.13, line 4 and abstract** ] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [ col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 ];
- the detectors coupled to transmitters for transmitting warning signals (100,102, 104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 and **col.12, line 60 to col.13, line 4** ];
- the detectors having electronic circuits contain radio frequency **identification** signals / encoded identifications / tags transponders are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken and so on [ col.12, line 60 to col.13, line 4 ];
- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100,102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tampering

the tether (32), movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) [ figs. 1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62 ].

The reference of McSheffrey does not specifically mention tampering indicating device and the fire extinguisher trigger pin as claimed by the applicant

However, McSheffrey does disclose a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure in the tank (34) of the fire extinguisher and material in a volume of the tank, internal and external conditions which the fire extinguishers (12) are docked in a station (16) [ figs.4-7, col.4, lines 2-24, col.6, lines 45-58 and col.10, lines 24-62 ];

- the detectors having **electronic circuits** contain radio frequency **identification signals / encoded identifications / tags transponders** are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken / **tampered or we may call pin is broken** [ col.8, line 54 to col.9, line 20 col.12, line 60 to col.13, line 4 ];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 ].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the system of McSheffrey for monitoring the fire extinguisher is in good condition at all time.

5. Claims 44-46 & 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over McSheffrey et al. (U.S. 6,488,099) in view of Runyon et al (U.S. 6,774,782).

Regarding claims 44-46, McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [ figs. 1-3,11, col.4, lines 2-26, col.6, lines 45-58, **col.8, line 54 to col.9, line 20, col.12, line 60 to col.13, line 4** and abstract ] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [ col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.10, lines 24-62 ];
- the detectors coupled to transmitters for transmitting warning signals (100,102, 104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 and col.12, line 60 to col.13, line 4 ];
- the detectors having electronic circuits contain radio frequency **identification** signals / **encoded identifications** / tags transponders are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken / tampered and so on [ col.12, line 60 to col.13, line 4 ];
- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100,102, 104) about the

conditions of the fire extinguishers (12) as testing, maintenance, inspected, tampering the tether (32), movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) by radio signal as desired [ figs. 1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62 ].

The reference of McSheffrey does not specifically mention transceivers are connected to the tire extinguisher and interrogation signal as claimed by the applicant. However, McSheffrey discloses the monitoring system includes the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 and col.12, line 60 to col.13, line 4 ];

- the detectors having electronic circuits contain radio frequency **identification** signals / **encoded identifications / tags transponders** are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken / tampered and so on [ col.12, line 60 to col.13, line 4 ];

- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100,102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tampering the tether (32), movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) by radio

signal as desired [ figs. 1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62 ].

Therefore, it would have been obvious to one having ordinary skill in the art to have the method of McSheffrey for transmitting the warning signal to the remote receiver if AINY fire extinguisher is not in the normal condition.

Furthermore, Runyon teaches a system for reducing security risks in an enclosed area where there are documents and other items (32-44) has an RFID tag (32a-44a) attached thereto. The area is periodically interrogated by an RF interrogator to ascertain whether the items are in their locked secured position or are in an open area [ figs. 1-2, col.9, lines 25-35, col.10, lines 16-34 and col.11, lines 45-54 ].

Therefore, it would have been obvious to one having ordinary skill in the art to use the teaching of Runyon in the system of McSheffrey for communicating each other as question & reply between the transponder / RFID tag and the remote central station and to provide overall security of the area is enhanced.

Regarding claims 48-49, McSheffrey discloses battery devices (98) may power to plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure, tether (32) is tampered and so on which the fire extinguishers (12) are docked in a station (16) [ fig.8, col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.8, line 54 to col.9, line 20 ];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal from the battery devices (98) [ figs.1,8, col.8, line 54 to col.9, line 20 and lines 57-62 ];
- the detectors having electronic circuits contain radio frequency **identification** signals / **encoded identifications / tags transponders** are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken / tampered and so on [ col.12, line 60 to col.13, line 4 ].

***Allowable Subject Matter***

6. Claims 28, 33-34, 36, 47 & 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. Claims 13-19, 21, 38-41 & 43 are allowed.

***Arguments & Responses***

8. Applicant's argument filed on Oct. 27, 2005 have been fully considered but they are not persuasive reasons in the following.

**Arguments:**

A/ Applicant states that in claim 50 recites sensors for tampering, of trigger pins of respective fire extinguishers by radio signal.

B/ Applicant states that in claims 22 & 30 recite sensors for tampering, of trigger pins of respective fire extinguishers and having tamper indicating device.

C/ The references of McSheffrey & Runyon can not be combined.

**Responses**

A/ McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by **radio signal** [ figs. 1-3,11, col.4, lines 2-26, col.6, lines 45-58, **col.8, line 54 to col.9, line 20, col.12, line 60 to col.13, line 4** and abstract ] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [ col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 ];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by **wireless signal** [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 and col.12, line 60 to col.13, line 4 ];
- the detectors having **electronic circuits** contain radio frequency **identification signals / encoded identifications / tags transponders** are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken, tether is tampered or **we may call pin is broken** [ col.8, line 54 to col.9, line 20 and col.12, line 60 to col.13, line 4 ].

B/ McSheffrey does disclose a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure in the tank (34) of the fire extinguisher and material in a volume of the tank, internal and external conditions which the fire extinguishers (12) are docked in a station (16) [ figs.4-7, col.4, lines 2-24, col.6, lines 45-58 and col.10, lines 24-62 ];

- the detectors having electronic circuits contain radio frequency **identification signals / encoded identifications / tags transponders** are attached to each of the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, tether (32) is broken / tampered or **we may call pin is broken** [ col.8, line 54 to col.9, line 20 col.12, line 60 to col.13, line 4 ];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [ fig.1, col.8, line 54 to col.9, line 20 and lines 57-62 ].

C/ Examiner & those skilled in the art would believe that , it would be obvious to combine the references of McSheffrey & Runyon for rejections because both direct teaching about security in enclosure and using the RFID signal.

### **Conclusion**

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (571) 272-2982. The examiner can normally be reached on Monday to Friday from 9:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (571) 272-2981. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**HUNG NGUYEN  
PRIMARY EXAMINER**

  
Examiner: Hung T. Nguyen

Date: Dec. 14, 2005